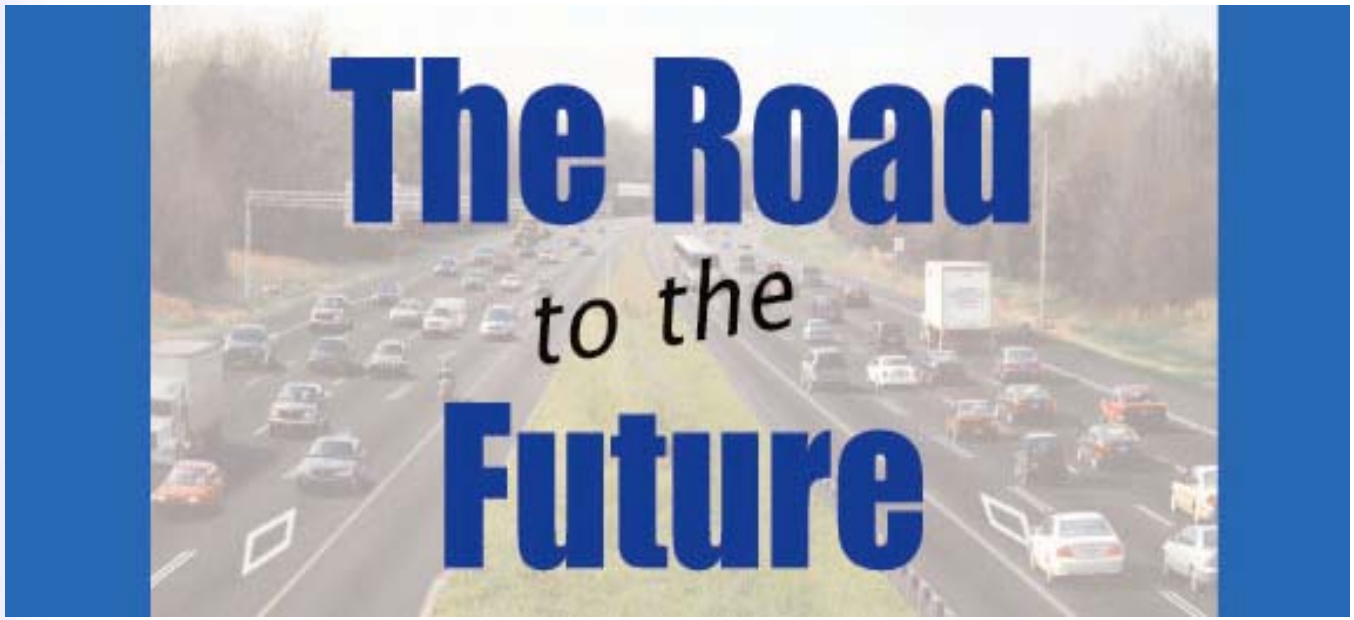
High Occupancy Vehicle Lanes (HOV)

I-77 HOV PROJECT



Cheryl Evans
Traffic Operations Engineer
September 2004

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Overview

- **HOV Lanes at a Glance**
- **Background on the HOV Facility**
- **HOV Project Limits**
- **I-77 Operations Plan**

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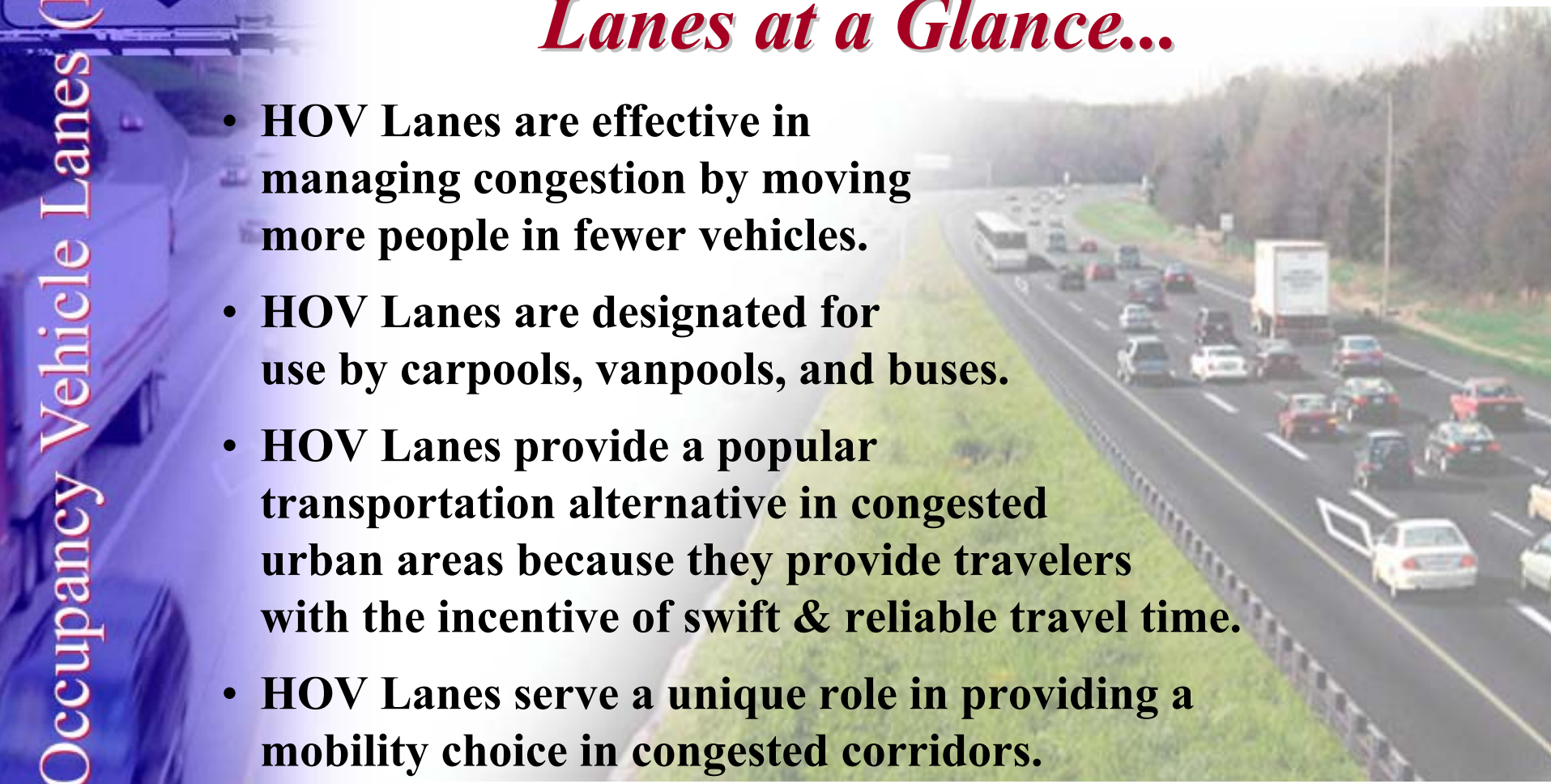
High Occupancy Vehicle (HOV) Lanes at a Glance...

High Occupancy Vehicle Lanes (HOV)



- **HOV Lanes are effective in managing congestion by moving more people in fewer vehicles.**
- **HOV Lanes are designated for use by carpools, vanpools, and buses.**
- **HOV Lanes provide a popular transportation alternative in congested urban areas because they provide travelers with the incentive of swift & reliable travel time.**
- **HOV Lanes serve a unique role in providing a mobility choice in congested corridors.**

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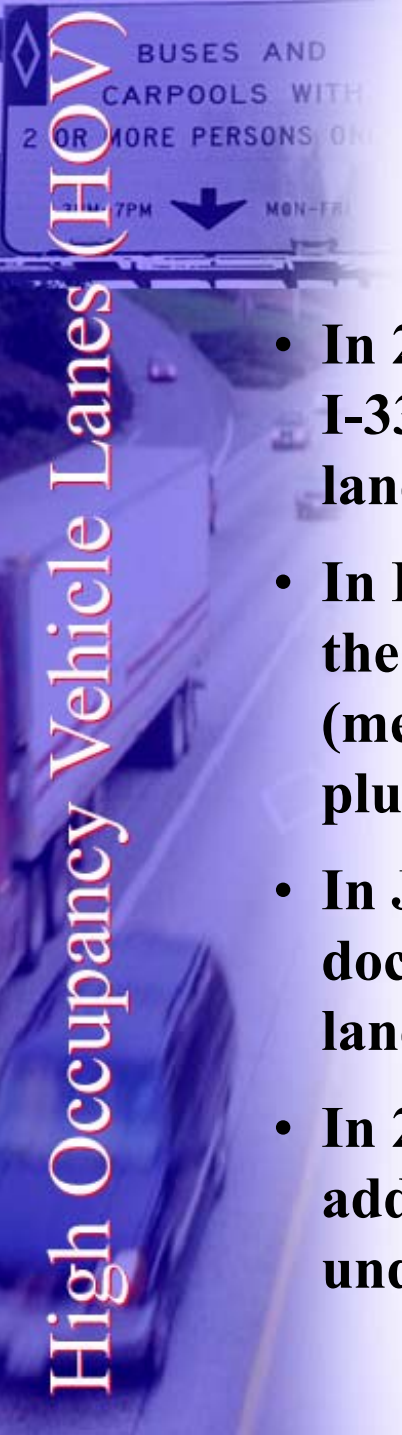

Background on the I-77 HOV Facility

- **In 2001, the (NCDOT) began widening I-77 under project I-3311A. The project, involves widening the existing four-lane interstate facility to an eight-lane freeway.**
- **In December 2001, NCDOT completed a study to analyze the feasibility of including HOV lanes as the inside (median) lanes, resulting in three general-purpose lanes plus one HOV lane in each direction.**
- **In July 2002, the FHWA approved an environmental document that proposed designating two of the additional lanes for HOV's.**
- **In 2003, NCDOT approved HOV lane construction as an addition to the I-77 widening work that was already underway.**

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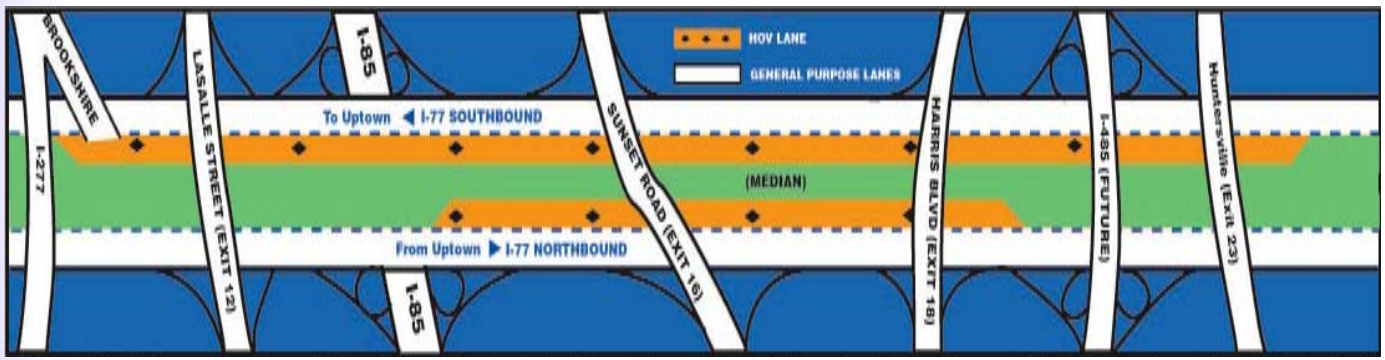
High Occupancy Vehicle Lanes (HOV)

I-77 HOV Project Limits

The Southbound lane begins north of the future interchange with I-485 and runs approximately 10 miles through the Brookshire Freeway (I-277) interchange.



The Northbound lane begins north of the I-85 interchange and runs approximately 5 miles through the W. T. Harris Boulevard interchange.

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High Occupancy Vehicle Lanes (HOV)

Design Features

The I-77 HOV lanes will be separated from the adjacent general-purpose lanes by two types of pavement markings: a wide single white skip line and double white solid lines.

- **The wide single white skip line will indicate the locations where eligible vehicles may enter or exit the HOV lane.**
- **The double white solid pavement lines will show where access to or from the HOV lane is prohibited to ensure safety for all travelers.**
- **A diamond symbol, used both in pavement markings and on overhead signs, also will identify the HOV lanes.**

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I-77 HOV Lane Facts

High Occupancy Vehicle Lanes (HOV)

HOV Lane Eligibility: Vehicles with 2 or more people; buses, motorcycles; emergency vehicles.

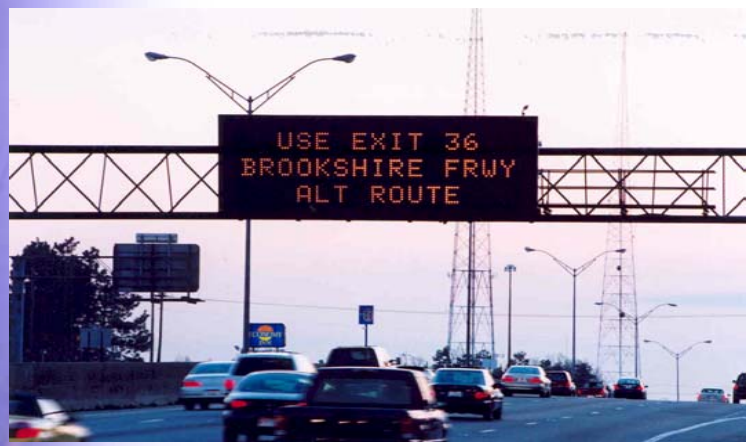
Operations: Full-time (24 hours a day - 7 days a week)

Penalty for a Violation: $100 plus court cost and 2 driver license points.

High Occupancy Vehicle Lanes (HOV)

HOV Operations During Incidents & Emergencies

During emergency situations when incidents disrupt one or more lanes along I-77, NCDOT's Metrolina Regional Transportation Management Center (MRTMC) will determine if the HOV lanes may be opened to all traffic around the scene of a major incident.



When this happens, MRTMC staff will advise motorists through media releases and dynamic message signs along the corridor.

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Enforcement

- **HOV Legislation**
- **Enforcement Program Workshops**
- **Funding for HOV Enforcement during initial period**
- **Meetings with Mecklenburg County's District Attorney & Judges**
- **Metrolina Incident Management Plan**

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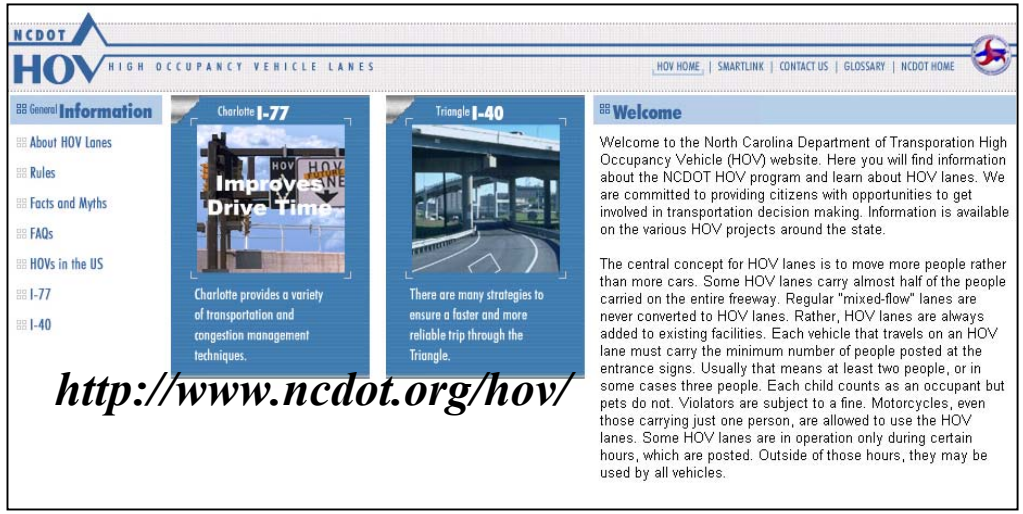
HOV Education & Outreach Activities

- Website
- Print Collateral Items
- Print/Signage Items
- Media Relations Actions
- Special Events/Outreach Actions
- Worksite Promotion
- Direct Mail Promotions



http://www.ncdot.org/hov/

Performance Measures for Evaluating the HOV Lane Project

- **Operations - Total person throughput, travel times for both the HOVs and Single Occupant Vehicles, safety, and traffic operations at the beginning and ending of transitions.**

- **Modal Impact - HOV lane use, transit ridership, number of persons per vehicle, vanpool use.**

- **Public Perception - Public perception of success. This will include survey results, phone calls, internet comments, etc.**

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High Occupancy Vehicle Lanes (HOV)

Anticipated HOV Opening

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